

## Interagency Aviation Accident Prevention Bulletin



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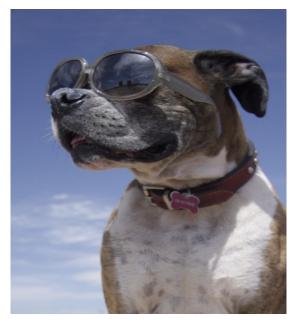
**Subject: Dog Days of Summer** 

**Area of Concern: Aviation Safety** 

**Distribution: All Aviation Activities** 

**Discussion**: Most of you have heard the phrase "The Dog Days of Summer". But do you know when the Dog Days of Summer are? The specific days traditionally referred to as the Dog Days of Summer are from July 3 to August 11. It was on these days that the Romans saw the Dog Star, Sirius, join the sun at sunrise and disappear from the night sky.

Sirius is the alpha star in the constellation Canis Major. Canis Major is called the Big Dog, which gives Sirius its nickname of "the Dog Star". The name Sirius means "scorching," which may relate to its brightness as a star and its relationship to summer. It was because Sirius "disappeared," or joined the sun during the summer, that the saying came about. Ancient Romans believed that Sirius added its warmth to that of the sun's as they neared one another and that this was what produced the hottest days of summer.



While the Dog Days of Summer are still considered to be July 3 to August 11, these are no longer the exact dates when Sirius joins the sun in the daytime sky. Because the Earth slowly wobbles on its axis, which is called precession, Sirius does not start rising with the sun in North America until more than a month later, on August 4. So the 40 days following August 4 would be the "new" Dog Days of Summer, ending on September 12.

No matter the actual dates of the Dog Days of Summer, the long, hot summer days seem endless. Fatigue and heat stress is a constant threat to pilots and aviation personnel.

Everyone associated with aviation operations should be aware of the insidious effects of fatigue (see Interagency Safety Alert 08-02) at: <a href="http://amd.nbc.gov/safety/alerts/IA\_0802.pdf">http://amd.nbc.gov/safety/alerts/IA\_0802.pdf</a>. The National Transportation Board (NTSB) has cited fatigue (aircrew as well as aircraft maintainer) as a significant contributing factor in aviation accidents and has included it on their Most Wanted List of actions needed by federal agencies. Managers at every level should ensure that every precaution is taken and that proper risk management is used to mitigate the effects of fatigue. An excellent brief on fatigue and fatigue management by the Missoula Technology and Development Center can also be found at: <a href="http://www.fs.fed.us/fire/training/fatigue/fatigue.ppt">http://www.fs.fed.us/fire/training/fatigue/fatigue.ppt</a>

Summer time aviation operations usually takes place at relatively low above ground level (AGL) altitudes that are associated with high temperatures and humidity. The added heat associated with fire suppression missions can seriously limit a pilot's ability to accomplish complex tasks (see DOI Aviation Accident Prevention Bulletin 09-02) at: <a href="http://amd.nbc.gov/safety/prevent/DOIAPB0902.pdf">http://amd.nbc.gov/safety/prevent/DOIAPB0902.pdf</a>. Heat stress can affect not only aircrew but support personnel as well. Again, managers at every level should ensure that every precaution is taken and that proper risk management is used to mitigate the risk of heat stress.

/s/ Robert Galloway
Robert Galloway
Aviation Safety Manager

/s/ Ron Hanks
Ron Hanks
Chief, Aviation Risk Management
and Training Systems